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Planning Commission Date: October 27, 2004 Item No.

MILPITAS PLANNING COMMISSION AGENDA REPORT

Category: Public Hearing Report prepared by: Kim Duncan

Public Hearing: Yes: __X__ No: _____

Notices Mailed On: 10-15-04 Published On: 10-14-04 Posted On: 10-15-04

TITLE:	**USE PERMIT NO. UP2004-24, 'S' ZONE APPROVAL AMENDMENT NO. SA2004-85.**
Proposal:	Request to install six (6) telecommunication antennas on a replaced light standard and associated ground mounted equipment and enclosure at the Milpitas Sports Center.
Location:	1325 East Calaveras Boulevard (APN: 029-17-004)
RECOMMENDATION:	**Approval with conditions.**
Applicant:	Verizon Wireless, 2001 Omega Road, San Ramon, CA 94583.
Property Owner:	City of Milpitas, 455 East Calaveras Boulevard, Milpitas, CA 95035.
Previous Action(s):	None
Environmental Info:	Exempt pursuant to Section 15303, Class 3-e
General Plan Designation:	Park and Open Space
Present Zoning:	Park and Public Open Space (POS)
Existing Land Use:	Public Sports Facility
Agenda Sent To:	Applicant & owner
Attachments:	Plans, project description, photo simulations, telecommunications questionnaire, FCC license, power density study, build-out map, generator noise analysis.
PJ No.	2393

BACKGROUND

In June of 1986, the City of Milpitas acquired the Milpitas Sports Center property, which was previously part of the Ayer High School recreational facility. The Center includes an indoor swimming pool and athletic facility, outdoor track, as well as football, baseball and soccer fields. In 1987, the City Council adopted a Sports Center Master Plan, and subsequently approved updates to the Master Plan in 1996 and October, 2004.

Site Description

The project site is a 2.03 acre parcel located in the southeastern portion of the 24.4 acre Milpitas Sports Center facility, which is located north of East Calaveras Boulevard, bound to the south by East Calaveras Boulevard, west by Park Victoria Drive and east by Fanyon Street. Cardoza Park is located north, adjacent to the Sports Center along Kennedy Drive. The project site consists of an unused, mud ditch area east of the City water tank and adjacent baseball field to the north. According to the Milpitas Sports Center Master Plan, future uses include a city maintenance yard and relocated baseball field. Surrounding land uses of the project site include residential along the eastern portion, public sports and playing fields to the north and west, and the Milpitas Unified School District (formerly Ayer High School) adjacent to the south.

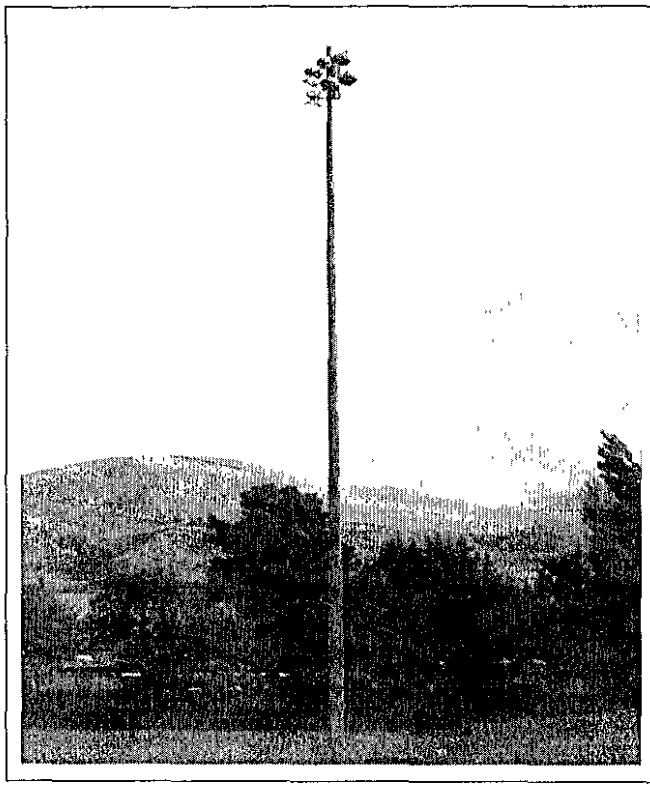
THE APPLICATION

This Use Permit application is submitted pursuant to Title XI, Chapter 10, Section 57.02-15.1 (Conditional Use Permit for Wireless Communication Facility) and Section 42.10-2 (Site and Architectural Review-Applications for modifications or amendment) of the Milpitas Zoning Ordinance. The applicant is requesting approval to remove an existing sports field light pole, install six (6) telecommunication antennas on a new 91-foot tall monopole with new light standards, and associated ground mounted equipment at the Milpitas Sports Center.

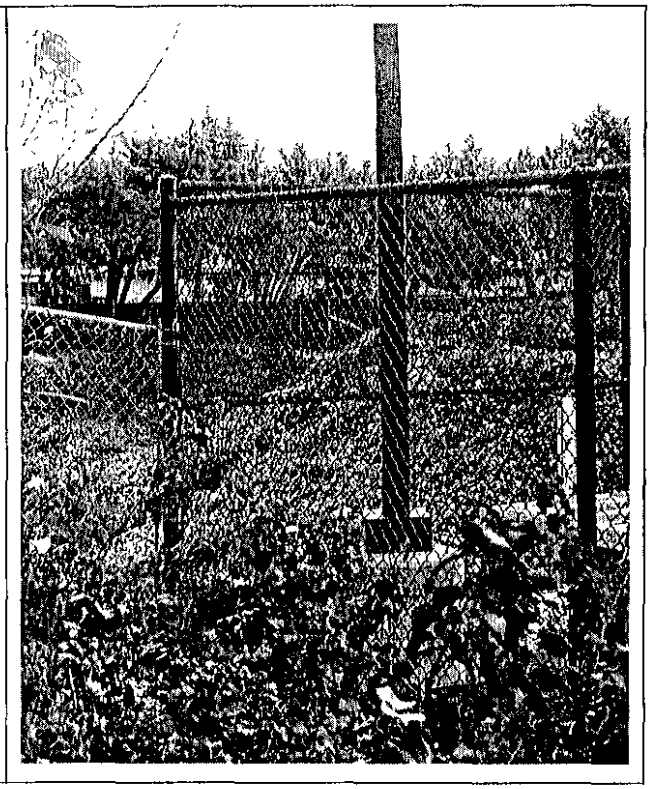
Project Description

The applicant is proposing to remove an existing sports field light pole at the southern end of the baseball field and install six (6) telecommunication antennas on a new 91-foot tall monopole. The new monopole would be located approximately 20 feet north of the existing light pole and the existing light standards would be mounted on top of the monopole. The six-(6) telecommunication antennas are proposed to be 48 inches in height and flush mounted on the monopole six (6) inches (from the pole) on two (2) tiers, with three (3) antennas on each tier. The new monopole would be constructed of a gray steel to match the existing field lighting poles and the antennas would be painted to match the monopole.

In addition, the applicant is proposing to install associated ground mounted equipment at the northern portion of the existing maintenance yard. The ground mounted equipment would be housed in an approximately 220 square foot equipment shelter. The shelter is proposed to be ten (10) feet in height and constructed of concrete and rock. A generator would be located to the east



View looking east



Proposed equipment location

of the equipment shelter. Both the equipment shelter and generator would be enclosed by a six (6)-foot tall concrete masonry enclosure with metal gate. As part of this application, the applicant is proposing to remove six (6) existing birch trees and install landscaping along the south and east portions of the enclosure.

Conformance with the General Plan

The proposed project complies with the City's General Plan in terms of Policies 2.a-I-7 and 6-I-7. The proposed project provides a service that supports surrounding businesses, which can assist in expanding employment, facilitating communications, promoting business retention and supports Milpitas residents and I-680 travelers. In addition, the project avoids residential Day-Night Noise Level (DNL) exposure increases of more than 60 decibels at the property line.

Conformance with the Zoning Ordinance

The project as proposed conforms to the Zoning Ordinance. The Zoning Ordinance, Section 57 (57.01 (b), 57.02-15, and 57.03-5) allows for the proposed use to be approved in this district if it is deemed essential or desirable to the public, suitable to the site, and not detrimental or injurious to properties in the vicinity. The proposed site is in the southeastern portion of the Milpitas Sports Center located adjacent to a single-family residential area. The antennas will be mounted atop a 91-foot tall monopole/light standard and will be flush mounted against the pole. The proposed facility blends in well with the light fixture and site, and the enclosure will match

existing buildings at the Sports Center. The equipment will not be visible from surrounding areas and will include landscaping, thus improving the immediate appearance of the site. In addition, the facility will provide enhanced coverage for Verizon cell phone users and will prevent dropped and lost calls.

Conformance with 'S' Zone

The project complies with the "S" Zone Combining District in that the modification to the existing light pole is compatible and harmonious with adjacent and surrounding development. The project is located in a Park and Public Open Space district and will replace an existing light standard with a new monopole/light standard and install six (6), flush mounted panel antennas approximately six (6) inches from the pole. In addition, an associated ground mounted generator would be installed within the new enclosure, therefore not visible from the surrounding area.

Conformance with the Milpitas Sports Center Master Plan

The project complies with the Milpitas Sports Center Master Plan, approved by the City Council on September 22, 2004, in that the applicant is proposing improvements that include a CMU enclosure and landscaping to a portion of the maintenance yard. Implementation of Phase 2 of the Master Plan provides for a maintenance and storage facility, consisting of asphalt surface, CMU bins for loose materials storage and landscaping. The applicant is proposing to relocate the light standard and the removal of six (6) birch trees to accommodate the relocation of the adjacent baseball field. According to Engineering Design, the Birch trees are planned for removal in Phase 2 of the Sports Center Master Plan, therefore staff is not requesting the applicant to replace the trees.

ISSUES

Community Impact

The applicant is proposing to remove an existing light pole, replace with a 91-foot tall monopole and install six (6) telecommunication panel antennas on top of the pole located at the Milpitas Sports Center. The proposed design includes installing the current light standards on top of the pole to enable continued use for the playing field. In addition, the telecommunication antennas will be flush mounted approximately six (6) inches from the pole, therefore projection of the antennas will be minimal. Typically, Planning staff supports telecommunication antenna applications with stealth designs to minimize the aesthetic impact of antennas on the community. However, the applicant has worked closely with City staff for a suitable location and design of the telecommunication facility, including three (3) alternate sites. The applicant provided staff with photosimulations of alternate designs for a Sports Center telecommunication facility, including parking lot light standards and radome designs. Of the design options, staff concluded the one proposed has the least visual impacts.

In addition, the applicant is proposing a ground-mounted generator to be located inside the proposed concrete enclosure 95-feet from a Single Family Residential district. According to manufacture's information submitted by the applicant, the maximum noise decibel (dB) emitted

from the proposed generator at the property line is 60 dB which, according to the General Plan Noise Element, is within the "normally acceptable" noise level in Single Family Residential districts.

The project proposal includes the construction of an approximately 220 square foot equipment shelter. The shelter is proposed to be a ten (10) foot tall, pre-fabricated building constructed of concrete and rock. Staff has concerns regarding the proposed construction materials in that it is difficult to remove graffiti from the surface, rocks have a tendency to fall off from environmental wear and the design does not match existing stucco buildings at the Sports Center. Therefore, ***staff recommends*** the applicant install an equipment shelter constructed of stucco to match existing buildings on site and that will be easier to maintain. The applicant agrees to this condition of approval.

The project proposal also includes an approximately 1,130 square foot, six (6) foot tall equipment enclosure constructed of concrete masonry (CMU). Staff has concerns regarding the use of CMU due to future development of the maintenance yard. According to the Milpitas Sports Center Master Plan, future development of the maintenance area will include the installation of a CMU storage area, however Engineering Design has indicated the use of fluted split block masonry in the development of the maintenance area. Therefore, ***staff recommends*** as a condition of approval, the proposed enclosure be constructed of fluted split block masonry. The applicant also agrees to this condition of approval.

The project is not anticipated to create any adverse impacts to surrounding land uses, in terms of traffic, parking, noise, odors or radio frequency emissions. Antenna sites are unmanned, and once installed, only require maintenance and repairs as needed, therefore no impacts on traffic or parking are anticipated. In addition, the antennas do not generate any noise and no odors are associated with this type of telecommunications facility.

Radio Frequency Emissions

In terms of radio frequency emissions, federal law preserves the City's authority to regulate the placement, construction, and modification of personal wireless service facilities (47 U.S.C. 332((c)(7)(A).) However, federal law does impose a limitation on this authority in the area of radio frequency (RF) emissions. The City is prohibited by federal law from regulating the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RF emissions to the extent the facilities comply with the Federal Communications Commission's (FCC) regulations concerning such emissions. (47 U.S.C. 332(c)(7)(B)(iv).

FCC Guidelines. The FCC has established guidelines that place limits on human exposure to RF fields generated by personal wireless service facilities. These guidelines have been endorsed by the U.S. Environmental Protection Agency and the Food and Drug Administration. The FCC requires all personal wireless facilities to comply with these guidelines.

City Requirements. The City, however, may still verify that applicants are in compliance with the FCC's guidelines. Therefore, the City requires applicants applying for use approval for any

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telecommunications device to submit a power density report. This report is reviewed by the City's Telecommunications Advisory Commission to ensure compliance with the FCC's guidelines. To the extent that an applicant's facilities, as proposed, are not in compliance with the FCC's guidelines, the City may require the applicant to make appropriate modifications to the facilities to ensure compliance.

Telecommunications Commission Review

The City of Milpitas Telecommunication Commission reviewed this project on September 20, 2004. Comments and concerns raised by the Telecommunication Commission were in regards to adequate signage in regards to safety and signage warning people of the presence of a monopole at this location. The Telecommunication Commission recommends approval of the proposal to the Planning Commission.

Environmental Review

This project is categorically exempt from further environmental review pursuant to Class 3, Section 15303 (e) of the California Environmental Quality Act (CEQA) Guidelines. This section addresses "New Construction or Conversion of Small Structures...consists of construction and...installation of small new equipment and facilities in small structures...including accessory structures."

RECOMMENDATION

Close the Public Hearing. Approve Use Permit Approval No. UP2004-24 and 'S' Zone Approval Amendment No. SA2004-85, subject to the Findings and Special Conditions listed below.

FINDINGS

1. The proposed project complies with the City's General Plan in terms of Policies 2.a-I-7 and 6-I-7 because the proposed telecommunication facility provides a service which commensurates with the present and anticipated needs of Milpitas residents and surrounding community. In addition, increased noise levels will not exceed minimum standards of 60 dB at the property line.

2. The proposed project complies with the City's Zoning Ordinance, which allows for telecommunications facilities as conditional uses in all zoning districts, will not be detrimental to the light, air or privacy of any other structure or use currently existing or anticipated.

3. As conditioned, the proposed use at this location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety and general welfare, since it will not create adverse traffic, parking, noise, odor or radio frequency emissions impacts.

    - The traffic and parking needs associated with the project at this site are limited to one monthly vehicular trip for maintenance purposes.

- The project complies with FCC guidelines in regards to RF emissions.
- The generator will be for emergency power back up and noise emissions will not exceed the "normally acceptable" decibels of the General Plan.
- The project will not result in any significant visual or aesthetic impacts because the proposed antennae/monopole is visually disguised as a sports field light pole and the associated electronic cabinets are concealed from view and enhanced with landscaping.

4. The proposed antennae and generator are categorically exempt from further environmental review pursuant to Class 3, Section 15303(e) of the California Environmental Quality Act (CEQA) Guidelines in that ("Existing Facilities", including but limited to addition to existing structures less than 2.500 square feet).

   - The project involves modifications to an existing sports field light pole and installation of associated ground mounted equipment within a new, approximately 1,131 square foot enclosure.

SPECIAL CONDITIONS

1. This approval is for Use Permit Approval No. UP2004-24 and 'S' Zone Approval Amendment SA2004-85 for the removal/replacement of a new light pole/monopole, six (6) telecommunication antennas and associated ground mounted equipment at 1323 East Calaveras Boulevard, as shown on the approved plans dated October 27, 2004. Any modifications to the Use Permit or conditions of approval require Planning Commission approval. Any modifications to these approved plans are also subject to Planning approval pursuant to Section 42.00. (P)
2. Prior to building permit issuance, the applicant shall submit revised plans showing the following:
   - Equipment enclosure shall be constructed of fluted split block masonry with metal doors.
   - Equipment shelter to be constructed of stucco to match existing buildings on site.
   - Plans shall reflect the APN number for this project as 029-17-004.
3. Prior to building permit issuance, the applicant shall submit revised landscape plans showing proposed irrigation and plantings. (P)
4. Prior to submittal for building permit issuance, the applicant shall submit a material sample of proposed materials for the equipment shelter to Planning Division staff for approval. (P)
5. Prior to building permit issuance, the project and plans shall conform with the following Fire Department and FCC requirements: (P, F):
   a) The tower access locations and near antennas shall be labeled for the hazard with a sign approved for location and content by the Fire Department.
   b) Each antennae shall be identified to denote its function, i.e., transmitter or receiver antennae. Shut down of transmitter antennas shall be provided. Contact the Fire Department for specifics on the requirements for shutdown. An indicator light shall

be incorporated in the shutdown system. Shutdown procedures shall be reviewed and approved by the Fire Department.

c) With the issuance of a permit for installation, an inspection shall be performed by the Fire Department to verify labeling, signage and transmission shutdown. Inspection fees shall apply.

6. This use shall be conducted in compliance with all appropriate federal, state and local laws and regulations and in conformance with the approved plans. (P)

7. If at the time of application for building permit there is a project job account balance due to the City for recovery of fees, review of permits will not be initiated until the balance is paid in full. (P)

8. If, at the time of building permit issuance, there is a project job account balance due to the City for recovery of fees, issuance of building permits will not be initiated until the balance is paid in full. (P)

9. Two weeks prior to the commencement of construction, the applicant shall contact the City Public Works Department (Dennis Cruz, 408/586-2631) for the relocation of maintenance yard materials on the project site. (P)

10. At the time of building permit plan check submittal the developer shall submit a grading and drainage plan prepared by a registered Civil Engineer. The subject plan shall be reviewed and approved by the City Engineer prior to any permit issuance. (E)

11. Prior to any permit issuance, the applicant shall execute an encroachment permit agreement for the maintenance of proposed landscaping and other improvements. The applicant shall also secure necessary and acceptable vehicular access to these facilities to the satisfaction of the City Engineer. (E)

12. Prior to any work within public right of way or City property and easement, the developer shall obtain an encroachment permit from City of Milpitas Engineering Division for the construction of the proposed improvements. (E)

13. Per Milpitas Municipal Code Chapter 2, Title X (Ord. No. 201), developer may be required to obtain a permit for removal of any existing tree(s). Contact the Street Landscaping Section at (408) 586-2601 to obtain the requirements and forms. (E)

Planning Division = (P)
Engineering Department = (E)

CAL COM SYSTEMS INC.

2001 Omega Road # 100, San Ramon, CA 94583

September 8, 2004

Kim Duncan
Project Planner
City of Milpitas

RE: Completion of Verizon/CUP Application

Kim, the purpose of Verizon application for a wireless facility at the Milpitas Sports Center is to enable Verizon to be able to provide high quality wireless services to its customer that live/commute in Milpitas. Also the Milpitas police department uses Verizon' wireless equipment, and this proposed facility will greatly enhance their wireless communications capabilities. Verizon currently has no coverage in the immediate area surrounding the sports facility. As the planning department is well aware of Verizon has been working on installing a facility in the immediate area for a few years. Verizon has worked on a few sites in the immediate area. The Embassy Suite was a candidate a few years ago, but Verizon was unable to come to business terms with the hotel. An office complex located at 880-920 Hillview Court was a candidate, but due to the design of the rooftop Verizon was unable to locate equipment at this building. We also looked at Extended Stay America located at 1000 Hillview Court, but we received no response to our proposal from the corporate office. I have enclosed the requested information regarding the proposed equipment shelter and generator/air conditioning unit. The color of the proposed monopole will match the existing poles at the park which is galvanized steel gray, and the pole is 24" in diameter. The project as proposed would require the removal of six birch trees. Kim again this proposal to build a wireless facility at the Milpitas Sports Center is to allow Verizon to address a service area that currently has no wireless coverage for its customers within the City of Milpitas. One of Verizon customers at within this service area is the Milpitas Police Department. Kim if you need additional please feel free to give me a call.

Sincerely,

Timothy Richardson
Project Manager
Cal-Com System
510-761-6985

United States of America

Federal Communications Commission

RADIO STATION AUTHORIZATION

Cellular Radiotelephone Service

GTE MOBILNET OF CALIFORNIA LIMITED PARTNERSHIP
245 PERIMETER CENTER PARKWAY
ATLANTA, GA 30346

Call Sign: KNKA211

File Number: 03283-CL-ML-98

Market: 0027 Channel Block:B-1 SID: 0040

Market Name: SAN JOSE, CALIFORNIA

The Licensee hereof is authorized, for the period indicated, to operate a radio transmitting station in accordance with the terms and conditions hereinafter described. This authorization is subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts of Congress, international treaties and agreements to which the United States is a signatory, and all pertinent rules and regulations of the Federal Communications Commission, contained in Title 47 of the Code of Federal Regulations.

Initial Grant Date..... March 12, 1985

Expiration Date..... May 15, 2005

WAIVERS / CONDITIONS:

Pursuant to Section 309(h) of the Communications Act 1934, as amended, (47 U.S.C. § 309(h)), this authorization is subject to the following conditions: (1) This authorization does not vest in the licensee any right to operate a station nor any right in the use of the electromagnetic spectrum designated herein beyond the term thereof nor in any other manner than authorized herein. (2) Neither this license nor the right granted thereunder shall be assigned or otherwise transfereed in violation of the Communications Act of 1934, as amended (47 U.S.C. § 151, *et. seq.*). (3) This authorization is subject in terms to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended (47 U.S.C. § 606).

This authorization does not convey to the licensee the right to receive protection from the capture of subscriber traffic, co-channel interference or first-adjacent-channel interference in any area outside of the authorized cellular geographic service area (CGSA) of the system. Moreover, any facility authorized herein with a service area boundary (SAB) extending into the CGSA of any other operating cellular system on the same channel block, regardless of when such other cellular system was authorized, is subject to the following condition: In the event that the licensee of the other cellular system requests that the SAB of the facilities authorized herein be removed from its CGSA, the licensee herein must reduce transmitting power or antenna height (or both) as necessary to remove the SAB from the CGSA, unless written consent from the licensee of the other cellular system, allowing the SAB extension to remain, is obtained.

Issued by PAL on Thursday July 30, 1998

FCC Form 463A

City of Milpitas
Planning Division
455 E. Calaveras Blvd.
Milpitas, CA 95035
(408) 586-3279

Questionnaire for Telecommunication Facility Providers

All applicants requesting to install telecommunications facilities within the City of Milpitas must complete this questionnaire as part of their use permit application submittal.

Applicant Name: Verizon Wireless

Applicant Address: 2001 Omega Road, San Ramon CA, 94583

Applicant Phone: 510-761-6985

Applicant Fax and e-mail address: 925-362-9526

Provide a brief description of project (Telecommunications Facility): Six (6) panel antennas to be mounted (flush) on monopole at the Milipitas Sports Center.

Location of Project: 1325 E. Calaveras Blvd

1. Please indicate below the frequency range you plan to use?

- ☐ VHF Low-Band (30-50 Mhz or 72-76 Mhz)
- ☐ VHF High-Band (136-174 Mhz or 220-222 Mhz)
- ☐ UHF or T-Band (406-420 Mhz or 450-470 Mhz or 470-512 Mhz)
- ☑ 800 or 900 Mhz Band (800-960 except 900 Mhz Spread Spectrum)
- ☐ 900 Mhz Spread Spectrum (902-928 Mhz)
- ☐ Other than specified above (State frequency band in Mhz). Describe: _____

2. Please indicate below the channel/system proposed for use?

- ☐ A single channel
- ☐ Multiple channel
- ☐ A frequency agile system
- ☑ A spread spectrum system
- ☐ Other than specified above. Describe: CDMA

3. Please indicate below the frequency range you plan to use?

- ☐ Narrow band (±5 Khz or less deviation)
- ☒ Broad band (greater than ±5 Khz deviation)
- ☐ Spread Spectrum
- ☐ Other than specified above. Describe: _____

4. What will be the effective radiated power (ERP) be when all channels at your proposed site are radiating? 1200 WATTS (SEE EMF Report) Will the site be in compliance with current ANSI radiation health standards? Yes

5. What horizontal radiation pattern is planned for this project?

- ☐ Omnidirectional
- ☒ Sectored 60°
- ☐ Directional (provide half power beam width) _____

6. What will the vertical radiation angle (half power beam width) be for your proposed antenna(s)? 14°

7. How high above the local terrain (e.g., surrounding structures) will the center of radiation of your proposed antenna(s) be? 82.5' CC feet

8. How close to your proposed project is the nearest roadway 1/4 feet/miles and, if elevated, what is the roadway's height above the local terrain? N/A feet

9. How close to your proposed project is the nearest regularly occupied building and how high is the top floor above local terrain? 200 Feet

10. What is the distance to the nearest existing radio communications or broadcast antenna(s) if less than ½ mile? N/A feet/miles. Answer question 1 for such existing antenna(s) and identify owner/operator, if known.

11. What is the status of your FCC license grant? Current (Include a *copy of the license with submittal of this questionnaire.)

NOTE: The below listed items are required by the applicant as part of this submittal:

a) Provider's build-out map* showing all sites anticipated within Milpitas (see question no. 2)

b) Photo simulations** of antenna(s) as viewed from at least three surrounding view points. Show "worst case" vantage points.

c) List of all sites that were investigated** for a particular search ring and the reasons why they were discarded. Include names and phone numbers of persons contacted regarding potential sites.

d) Copy of applicants Power Density Study* (see item no. 4).

* 20 copies (Telecommunication Commission)
** 35 copies (Telecommunication Commission & Planning Commission)

Back of
Telecommunication Questionnaire

Verizon Wireless • Proposed Base Station (Site No. 15000272113)
1325 East Calaveras Boulevard • Milpitas, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a wireless telecommunications carrier, to evaluate the base station (Site No. 15000272113) proposed to be located at 1325 East Calaveras Boulevard in Milpitas, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. In Docket 93-62, effective October 15, 1997, the FCC adopted the human exposure limits for field strength and power density recommended in Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent Institute of Electrical and Electronics Engineers ("IEEE") Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes nearly identical exposure limits. A summary of the FCC's exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

The most restrictive thresholds for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Personal Wireless Service	Approx. Frequency	Occupational Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio	855	2.85	0.57
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "cabinets") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables about 1 inch thick. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward

the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 attached describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including drawings by ATI Architects and Engineers, dated July 13, 2004, it is proposed to mount six Andrew directional antennas on a new 91-foot light pole replacing an existing light pole of the same height located near the baseball field at 1325 East Calaveras Boulevard in Milpitas. Three Model DB932LG65VTE-M PCS antennas would be mounted at an effective height of about 82½ feet above ground and three Model 85[illegible]DG85VTEX cellular antennas would be mounted at an effective height of about 75½ feet above ground. The antennas would be oriented in pairs (one PCS and one cellular) toward 55°T, 150°T, and 24[illegible]°T, with a maximum effective radiated power in any direction of 2,[illegible]00 watts, representing simultaneous operation at 1,200 watts each for PCS and for cellular service. There are reported no other wireless telecommunications base stations installed nearby.

Study Results

The maximum ambient RF level for a person anywhere at ground due to the proposed Verizon operation is calculated to be 0.0011 mW/cm^2, which is 0.15% of the applicable public limit. The maximum calculated level on the nearby water tank or at the second floor elevation of any nearby home* is 0.16% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels.

* Located at least 135 feet away, based on the drawings.

Recommended Mitigation Measures

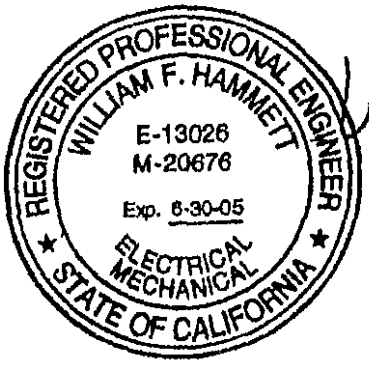
Due to their mounting location on a tall pole, the Verizon antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 6 feet directly in front of the Verizon antennas themselves, such as might occur during maintenance work on the lights, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs† at the antennas and/or on the pole below the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by Verizon Wireless at 1325 East Calaveras Boulevard in Milpitas, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Atbrshp

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on line 30, 2005. This work has been carried out by him or under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



William F. Hammett, P.E.

August 9, 2004

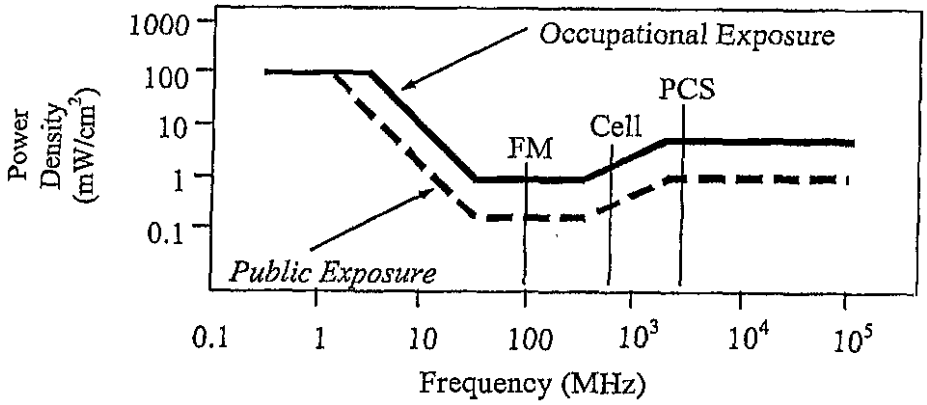
† Warning signs should comply with ANSI C95.2 color, symbol, and content conventions. In addition, contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements, which are nearly identical to the more recent Institute of Electrical and Electronics Engineers Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz." These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/f	*823.8/f*	*4.89/f*	*2.19/f*	*900/f^2*	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.

RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications cell sites. The near field zone is defined by the distance, D, from an antenna beyond which the manufacturer's published, far field antenna patterns will be fully formed;the near field may exist for increasing D until some or all of three conditions have been met:

$$1)\ D > \frac{2h^2}{\lambda} \qquad 2)\ D \geq 5h \qquad 3)\ D \geq 1.6\ \lambda$$

where h =aperture height of the antenna, in meters, and
λ =wavelength of the transmitted signal, in meters.

The FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives this formula for calculating power density in the near field zone about an individual RF source:

$$\text{power density}\quad S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}, \quad \text{in mW/cm}^2,$$

where θ_{BW} =half-power beamwidth of antenna, in degrees, and
P_{net} =net power input to the antenna, in watts.

The factor of 0.1 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates distances to FCC public and occupational limits.

Far Field.

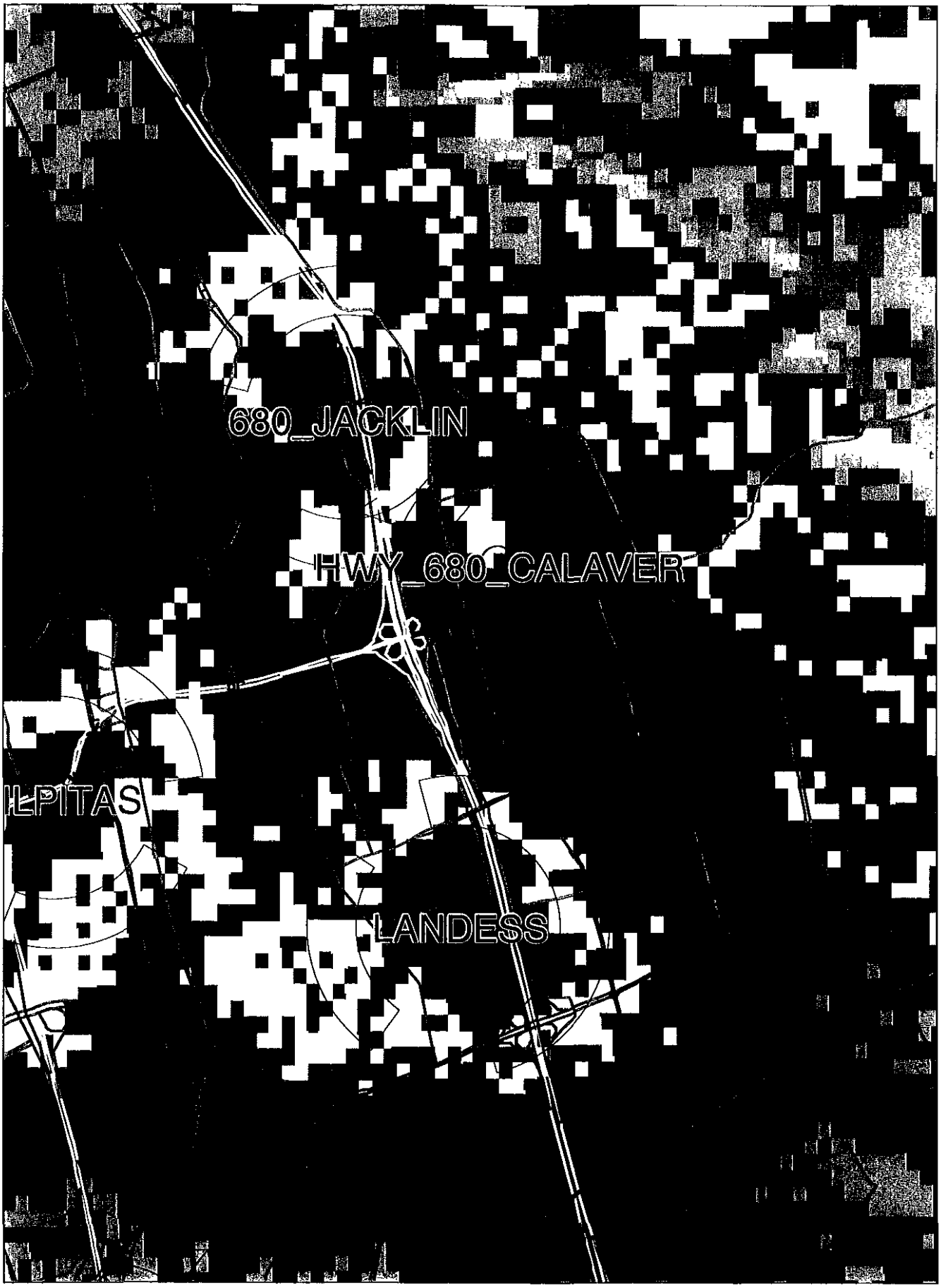
OET-65 gives this formula for calculating power density in the far field of an individual RF source:

$$\text{power density}\quad S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}, \quad \text{in mW/cm}^2,$$

where ERP =total ERP (all polarizations), in kilowatts,
RFF =relative field factor at the direction to the actual point of calculation, and
D =distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 =2.56). The factor of 1.64is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

BEFORE



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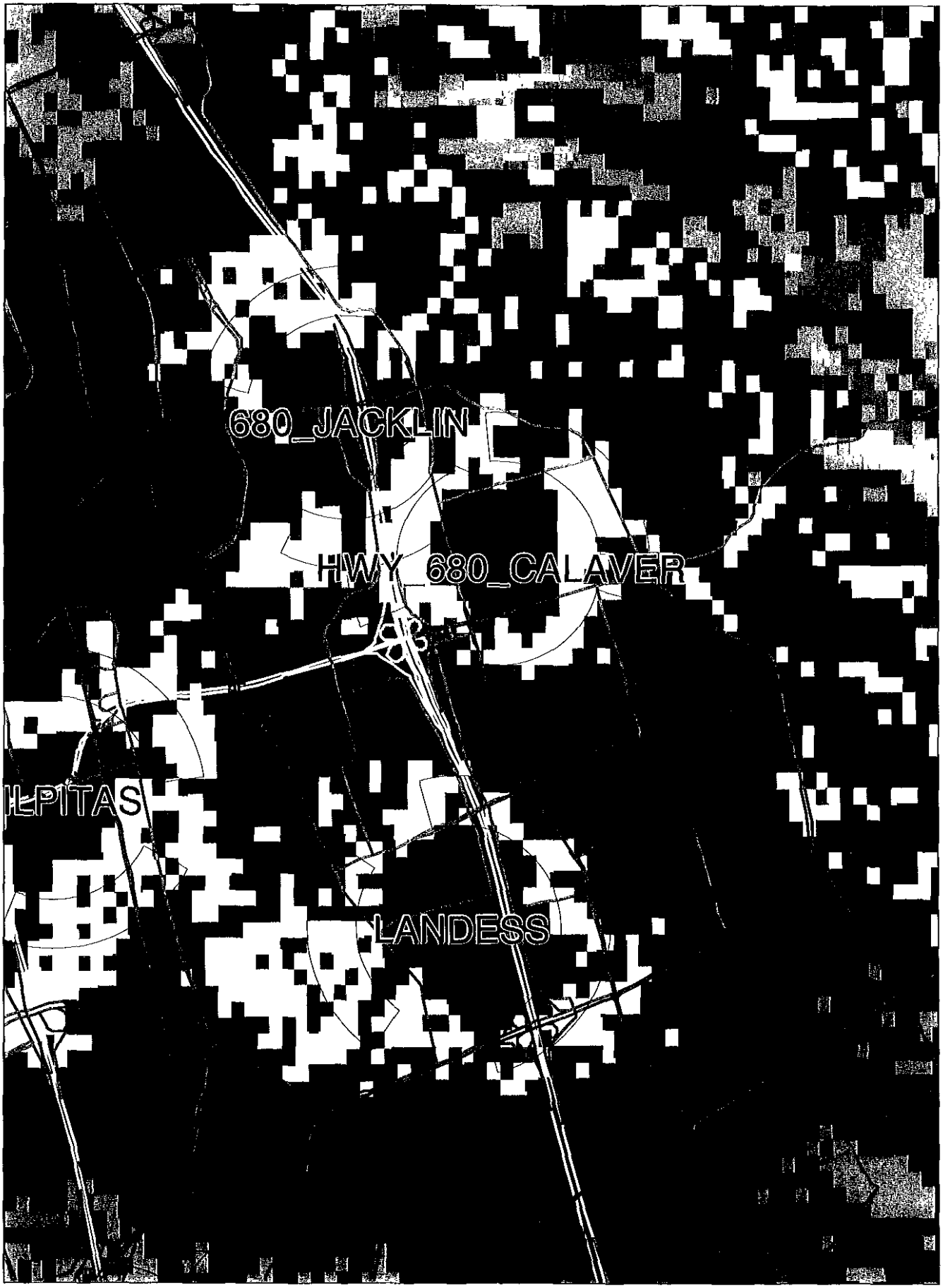
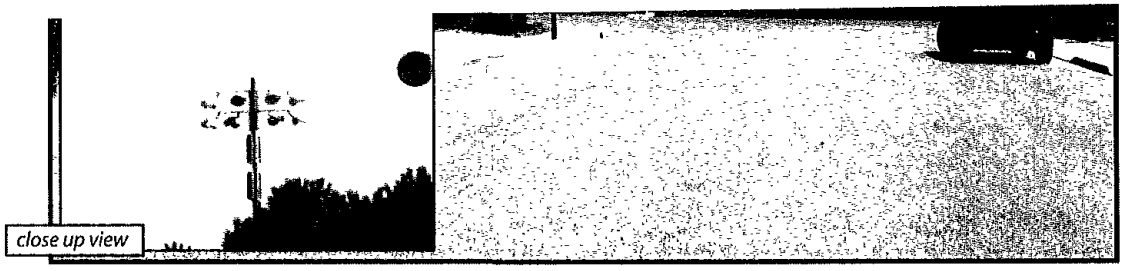




AdvanceSim
Photo Simulation Solutions
Contact (925) 202 8507

Existing

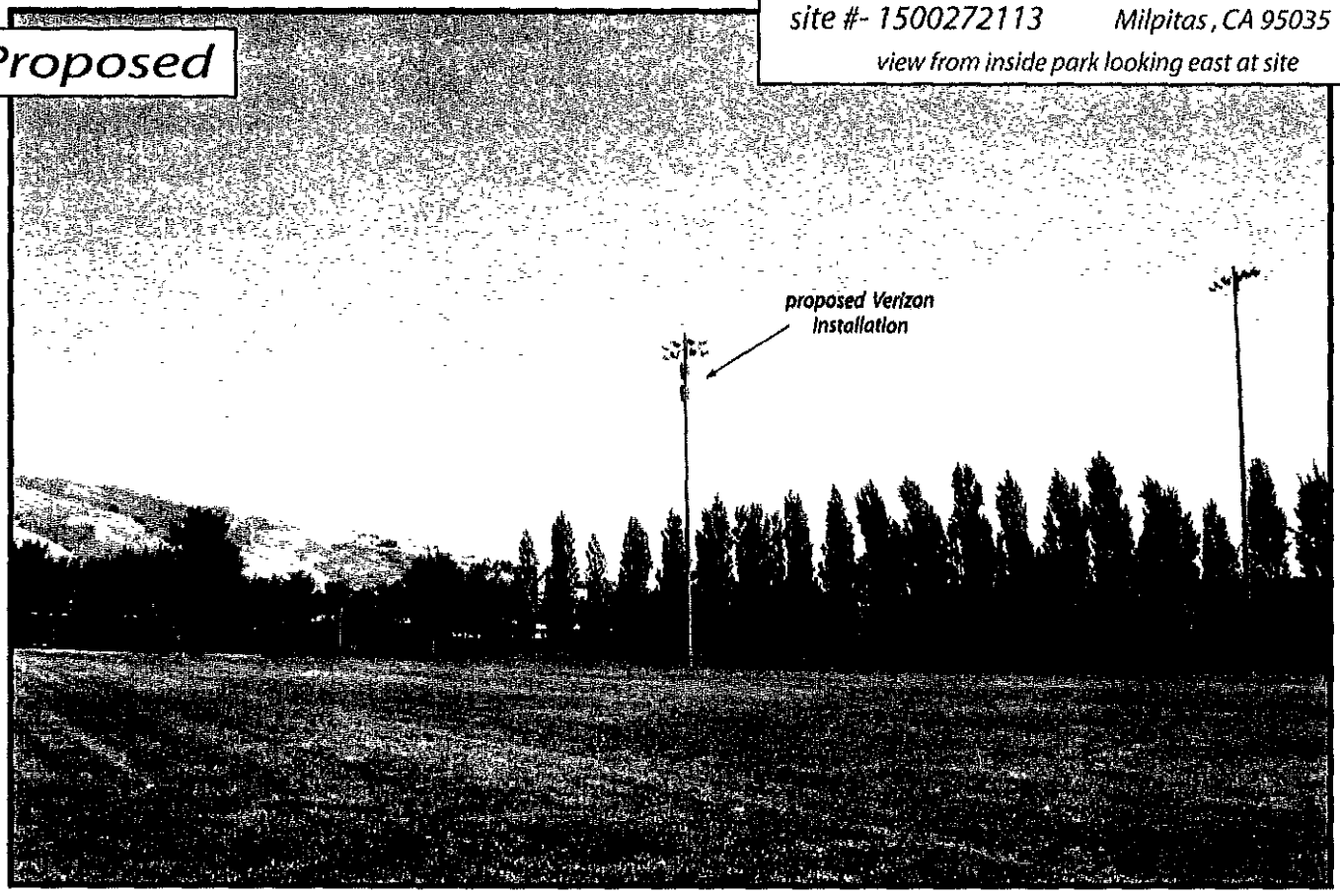
verizon

site #- 1500272113

HWY 680/ Calaveras
1325 East Calaveras blvd.
Milpitas, CA 95035

view from inside park looking east at site

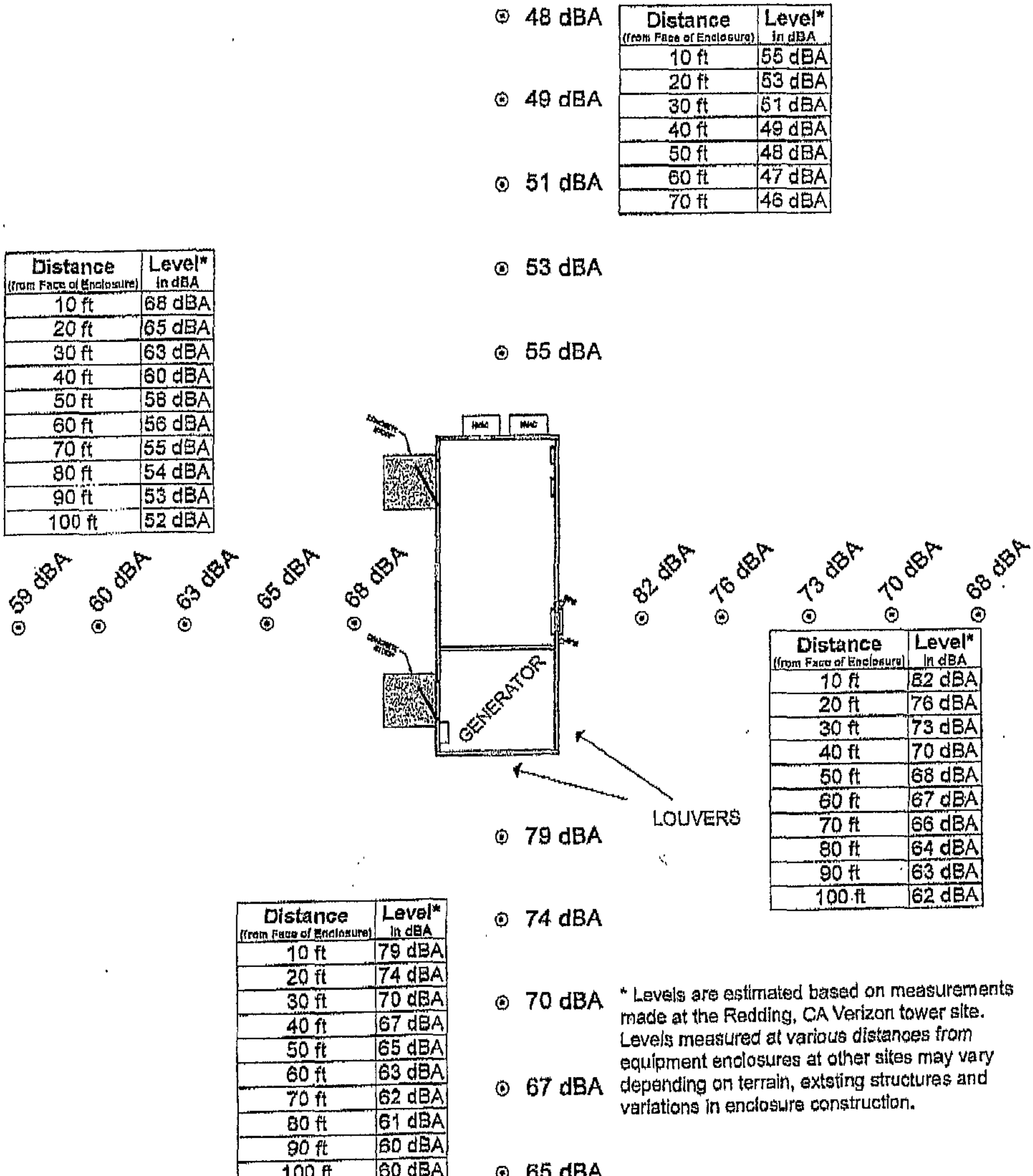
Proposed



AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Distance (from Face of Enclosure)	Level* in dBA
10 ft	55 dBA
20 ft	53 dBA
30 ft	51 dBA
40 ft	49 dBA
50 ft	48 dBA
60 ft	47 dBA
70 ft	46 dBA

Distance (from Face of Enclosure)	Level* in dBA
10 ft	68 dBA
20 ft	65 dBA
30 ft	63 dBA
40 ft	60 dBA
50 ft	58 dBA
60 ft	56 dBA
70 ft	55 dBA
80 ft	54 dBA
90 ft	53 dBA
100 ft	52 dBA



Distance (from Face of Enclosure)	Level* in dBA
10 ft	82 dBA
20 ft	76 dBA
30 ft	73 dBA
40 ft	70 dBA
50 ft	68 dBA
60 ft	67 dBA
70 ft	66 dBA
80 ft	64 dBA
90 ft	63 dBA
100 ft	62 dBA

Distance (from Face of Enclosure)	Level* in dBA
10 ft	79 dBA
20 ft	74 dBA
30 ft	70 dBA
40 ft	67 dBA
50 ft	65 dBA
60 ft	63 dBA
70 ft	62 dBA
80 ft	61 dBA
90 ft	60 dBA
100 ft	60 dBA

* Levels are estimated based on measurements made at the Redding, CA Verizon tower site. Levels measured at various distances from equipment enclosures at other sites may vary depending on terrain, existing structures and variations in enclosure construction.

Verizon Wireless Tower Site
A-Weighted Sound Pressure Levels
at 10 ft Increments Away from Equipment Enclosure
Not to Scale

Figure 1
12/18/02

Charles M Salter Associates Inc 130 Sutter Street San Francisco California 94104 Tel 415 397 0442 Fax 415 397 0454

*3

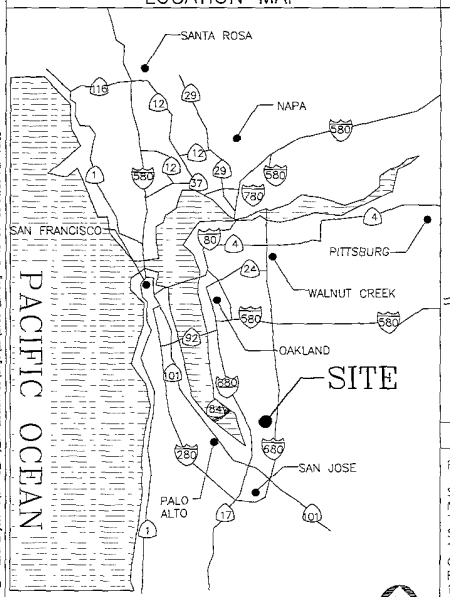
verizon wireless

HWY. 680 - CALAVERAS

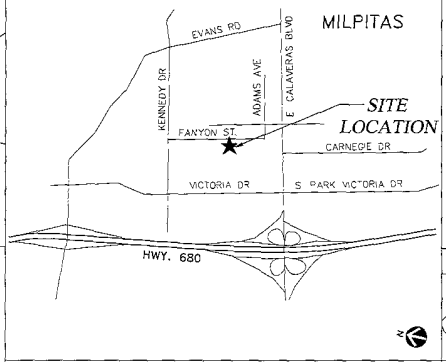
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035

SITE NO. 117359

LOCATION MAP



VICINITY MAP



SITE DIRECTION

FROM WALNUT CREEK (VERIZON WIRELESS).

START OUT GOING SOUTHWEST ON MITCHELL DRIVE TOWARD NORTH WIGET LANE. TURN LEFT ONTO NORTH WIGET LANE. TURN RIGHT ONTO YGNACIO VALLEY ROAD MERGE ONTO I-680 SOUTH TOWARD SAN JOSE.
TAKE THE CA-237/CALAVERAS BOULEVARD EXIT TOWARD CENTRAL MILPITAS. TAKE THE CALAVERAS BOULEVARD EAST RAMP MERGE ONTO EAST CALAVERAS BOULEVARD END AT 1325 EAST CALAVERAS BOULEVARD, MILPITAS, CA.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. CALIFORNIA ADMINISTRATIVE CODE (INCLUDING TITLE 24 & 25)
2. CALIFORNIA BUILDING CODE, 2001
3. CALIFORNIA MECHANICAL CODE, 2001
4. CALIFORNIA PLUMBING CODE, 2001
5. CALIFORNIA ELECTRIC CODE, 2001
6. COUNTY ORDINANCES

ACCESSIBILITY REQUIREMENTS:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2001 UNIFORM BUILDING CODE.

PROJECT DESCRIPTION

A TOTAL OF (6) 4'-0" VERIZON PANEL ANTENNAS TO BE MOUNTED ON A NEW MONOPOLE. EQUIPMENT IS TO BE INSTALLED ON A CONCRETE SLAB WITHIN A 22'-0" x 38'-0" LEASE AREA. AND A 60KW OUTDOOR GENERATOR WILL BE SUPPLIED. 3

BUILDING/SITE DATA LEGEND

OCCUPANCY :	GROUP 3	
TYPE OF CONSTRUCTION :	TYPE V-N.P. 3	
A.P.N. :	029-17-004+015	
SITE NUMBER :	117359	
ZONING :	OPEN SPACE / PARK	
ANTENNA TYPE :	4'-0" VERIZON PANEL ANTENNAS 3 SECTORS - 2 ANTENNAS PER SECTOR	
COAX LENGTH	SECTOR 1	250 FT.
	SECTOR 2	250 FT.
	SECTOR 3	250 FT

PROJECT DATA

OWNER :	MILPITAS REDEVELOPMENT AGENCY 1265 N MILPITAS BLVD. MILPITAS, CA 95035 CONTACT: BILL MARION TEL #: 408-586-2701
APPLICANT :	VERIZON WIRELESS 2785 MITCHELL DRIVE WALNUT CREEK, CA. 94598 CONTACT: JIM GRAHAM TEL #: 925-279-6333
AGENT :	CAL COM SYSTEMS 2001 OMEGA ROAD, SUITE 100 SAN RAMON, CA 94583 CONTACT: KEITH SCHMID TEL #: 408-679-1141
ARCHITECTURAL/ENGINEER :	ATI A&E 3860 BLACKHAWK ROAD DANVILLE, CA. 94506 CONTACT MARK SORENSON TEL #: 925-648-8800 FAX #: 925-648-8824

SHEET INDEX

T1	TITLE SHEET
T2	LEGEND, ABBREVIATIONS, GENERAL NOTES & DETAILS
C1	SURVEY
C2	SURVEY
A1	SITE PLAN, ANTENNA PLAN & SHELTER AREA PLAN
A2	EAST ELEVATION
A3	NORTH ELEVATION

ATI ARCHITECTS AND ENGINEERS
3860 Blackhawk Road
Danville, CA 94506
Phone (925) 648-8800
Fax (925) 648-8811
2410 Douglas Boulevard
Roseville, CA 95661
Phone (916) 772-1600

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680 - CALAVERAS
SITE NO. 117359 3
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING:		DATE:
ZONING:		DATE:
RF ENGINEER		DATE
CONSTRUCTION:		DATE:
EQUIP. ENGR.		DATE:
OWNER		DATE:

SITE NO	117359 3
APPROVED BY	MS
DRAWN BY	JN
CHECKED BY	SA

NO	DATE	ISSUE
1	07/09/04	ZD REVIEW
2	07/13/04	ZD SUBMITTAL
3	08/18/04	ZD REVISION

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

COMPANY JOB NO. C7399

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GENERAL NOTES

1 THE FACILITY IS AN UNOCCUPIED MOBILE RADIO FACILITY

2 PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

3 INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

4 CONTRACTOR SHALL NOTIFY PROJECT MANAGER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND TO BE IN THE FIELD

5 ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK. ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL CODES, NATIONAL ELECTRIC CODE AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

6 SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.

7 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 16 OF THE UNIFORM BUILDING CODE REGARDING EARTHQUAKE PROVISIONS FOR PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS AND MECHANICAL EQUIPMENT. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL EARTHQUAKE CODES AND REGULATIONS

NOTE:

ALL POWER AND TELEPHONE UTILITIES REQUIRED FOR SITE SERVICE ARE LOCATED WITHIN THE EXISTING PARCEL.

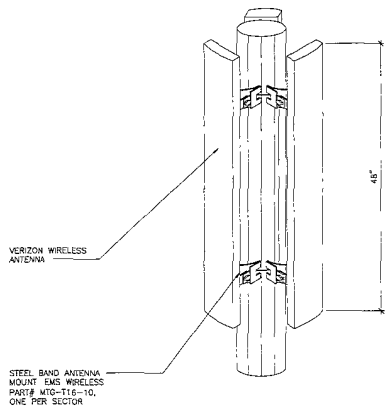
ABBREVIATIONS

A.B.	ANCHOR BOLT	F.O.C.	FACE OF CONCRETE	SPEC	SPECIFICATION(S)
ABV.	ABOVE	F.O.M.	FACE OF MASONRY	SQ	SQUARE
ACCA	ANTENNA CABLE COVER ASSEMBLY	F.O.S	FACE OF STUD	S.S	STAINLESS STEEL
		F.O.W	FACE OF WALL	S.S.D	SEE STRUCTURAL DRAWINGS
ADD'L	ADDITIONAL	F.S.	FINISH SURFACE	STD	STANDARD
A.F.F	ABOVE FINISHED FLOOR	FT.(')	FOOT(FEET)	STL.	STEEL
A.F.G	ABOVE FINISHED GRADE	FTG	FOOTING	STRUC	STRUCTURAL
A.G.L	ABOVE GROUND LEVEL	GR	GROWCH (CABINET)	T.B.D.	TO BE DETERMINED
ALUM	ALUMINUM	GA	GAUGE	TEMP.	TEMPORARY
ALT.	ALTERNATE	GI	GALVANIZE(D)	THK	THICK(NESS)
ANT	ANTENNA	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	T N	TOE NAIL
APPRX	APPROXIMATE(LY)	GLB (GLU-LAM)	GLUE LAMINATED BEAM	T.O.A.	TOP OF ANTENNA
ARCH.	ARCHITECT(URAL)	GPS	GLOBAL POSITIONING SYSTEM	T.O.C	TOP OF CURB
AWG	AMERICAN WIRE GAUGE	GRND.	GROUND	T.O.P	TOP OF PLATE (PARAPET)
BCW	BARE COPPER WIRE	HDR	HEADER	T.O.S	TOP OF STEEL
BLDG	BUILDING	HGR	HANGER	T.O.W	TOP OF WALL
BLK	BLOCK	HT.	HEIGHT	TYP	TYPICAL
BLKG	BLOCKING	ICGB	ISOLATED COPPER GROUND BUS	UG	UNDERGROUND
BM.	BEAM	IN (")	INCH(ES)	U.L	UNDERWRITERS LABORATORY
B.N	BOUNDARY NAILING	INT.	INTERIOR	U.N.O.	UNLESS NOTED OTHERWISE
B.O.F.	BOTTOM OF FOOTING	LB (#)	POUND(S)	V.I.F	VERIFY IN FIELD
B/U	BACK-UP CABINET	L.B.	LAG BOLTS	W	WIDE(WIDTH)
CAB.	CABINET	L.F.	LINEAR FEET (FOOT)	W/	WITH
CANT.	CANTILEVER(ED)	L.	LONGITUDINAL)	WD	WOOD
C.I.P.	CAST IN PLACE	MAS.	MASONRY	W.P.	WEATHERPROOF
CLG	CEILING	MAX.	MAXIMUM	WT.	WEIGHT
CLR	CLEAR	M.B.	MACHINE BOLT	XFMR	TRANSFORMER
COL.	COLUMN	MECH	MECHANICAL	℄	CENTERLINE
CONC.	CONCRETE	MFR	MANUFACTURER	ø	PLATE
CONN.	CONNECTION(OR)	MIN.	MINIMUM	AZ.	AZIMUTH
CONST.	CONSTRUCTION	MISC	MISCELLANEOUS		
CONT	CONTINUOUS	MTL	METAL		
d	PENNY (NAILS)	(N)	NEW		
DBL	DOUBLE	NO.(#)	NUMBER		
DEPT	DEPARTMENT	N.T.S	NOT TO SCALE		
D.F.	DOUGLAS FIR	O.C.	ON CENTER		
DIA	DIAMETER	OPNG	OPENING		
DIAG.	DIAGONAL	P/C	PRECAST CONCRETE		
DIM	DIMENSION	PCS	PERSONAL COMMUNICATION SERVICES		
DWG.	DRAWING(S)	PLY.	PLYWOOD		
DWL.	DOWEL(S)	POC	POINT OF CONNECTION		
EA	EACH	PPC	POWER PROTECTION CABINET		
EL.	ELEVATION	PRC	PRIMARY RADIO CABINET		
ELEC	ELECTRICAL	P.S.F.	POUNDS PER SQUARE FOOT		
ELEV	ELEVATOR	P.S.I.	POUNDS PER SQUARE INCH		
EMT	ELECTRICAL METALLIC TUBING	P.T	PRESSURE TREATED		
E.N	EDGE NAIL	PWR	POWER (CABINET)		
ENG.	ENGINEER	QTY	QUANTITY		
EQ	EQUAL	RAD (R)	RADIUS		
EXP.	EXPANSION	REF.	REFERENCE		
EXIST.(E)	EXISTING	REINF	REINFORCEMENT(ING)		
EXT.	EXTERIOR	REQ'D.	REQUIRED		
FABR.	FABRICATION(OR)	RGS.	RIGID GALVANIZED STEEL		
F.F.	FINISH FLOOR	SCH.	SCHEDULE		
F.G.	FINISH GRADE	S.E.D.	SEE ELECTRICAL DRAWINGS		
FIN	FINISH(ED)	SHT	SHEET		
FLR	FLOOR	SIM.	SIMILAR		
FDN	FOUNDATION	SP	SERVICE PANEL		

LEGEND

NEW ANTENNA	GROUT OR PLASTER
EXISTING ANTENNA	(E) BRICK
GROUND ROD	(E) MASONRY
GROUND BUS BAR	CONCRETE
MECHANICAL GRND CONNECTION	EARTH
CADWELD	GRAVEL
CHRISTY BOX	PLYWOOD
ELECTRIC BOX	SAND
LIGHT POLE	WOOD CONT
END MONUMENT	WOOD BLOCKING
SPOT ELEVATION	STEEL
SET POINT	CENTERLINE
REVISION	PROPERTY/LEASE LINE
GRID REFERENCE	GROUND CONDUCTOR
DETAIL REFERENCE	T — TELEPHONE CONDUIT
ELEVATION REFERENCE	E — ELECTRICAL CONDUIT
SECTION REFERENCE	A — COAXIAL CABLE
MATCH LINE	M — MECHANICAL
WORK POINT	T/E — OVERHEAD SERVICE CONDUCTORS
	X — CHAIN LINK FENCING
	P — PRIMARY VOLTAGE ELECTRICAL CONDUIT
	E/T — JOINT TRENCH (ELECTRIC/TELCO)

GPS ANTENNA DETAIL



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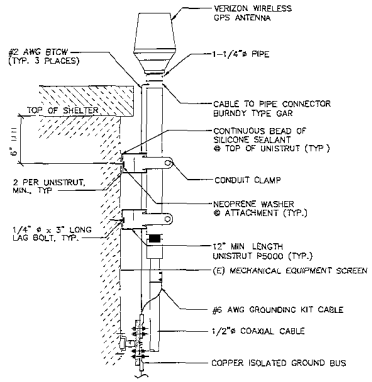

ATI
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Fax (925) 648-8811

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680 - CALAVERAS
SITE NO. 117359
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

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3	08/18/04	ZD REVISION

SHEET TITLE

LEGEND, ABBREVIATIONS, AND GENERAL NOTES

SHEET NUMBER

T-2

COMPANY JOB NO C7399

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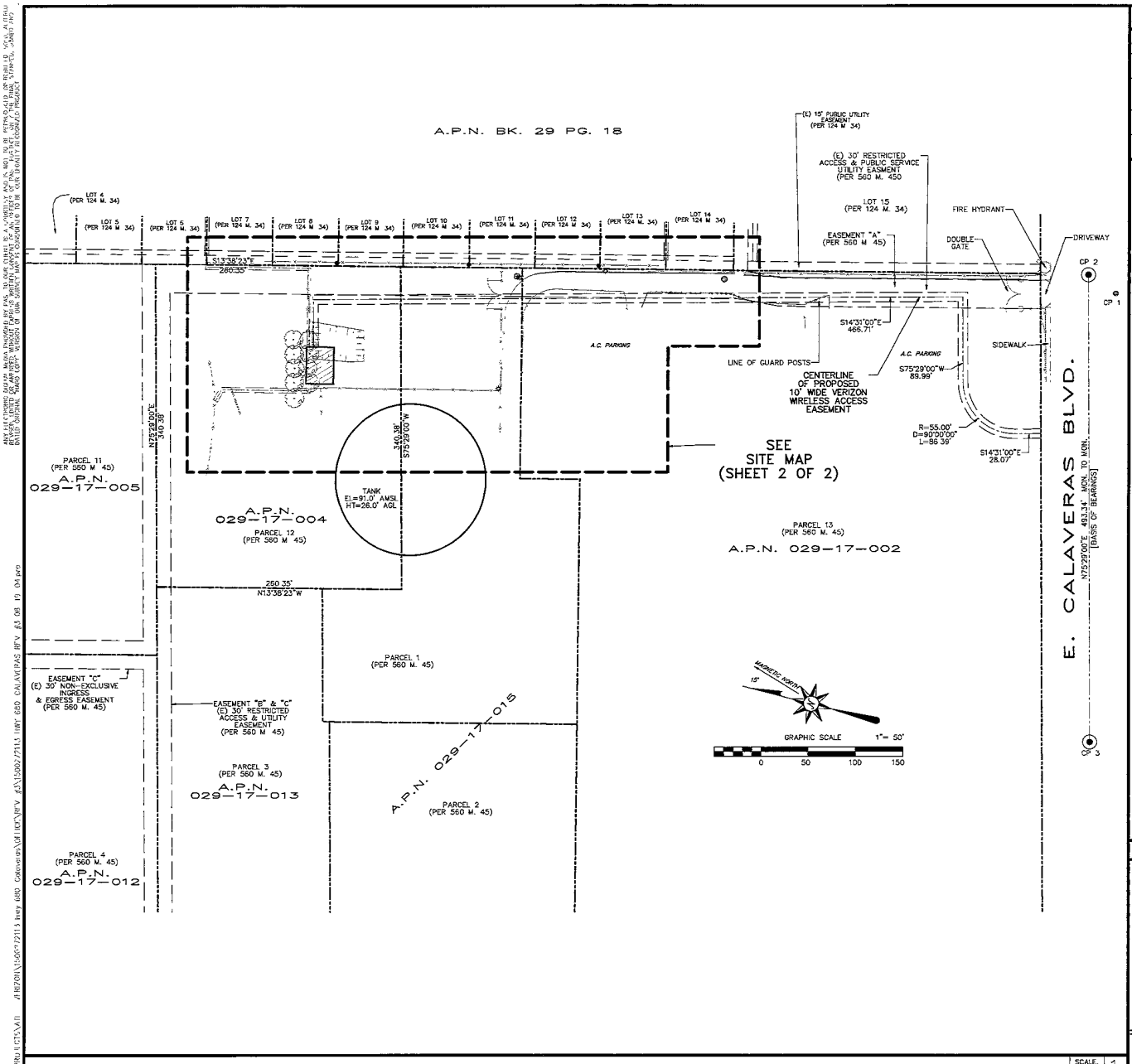


OVERALL SITE MAP

SCALE: 1"=50' 1

LEGEND

MANHOLE		FIRE HYDRANT	
LIGHT POLE		MONUMENT	
16" BIRCH 51' HIGH (TYPICAL)		HANDICAPPED PARKING	
JP	JOINT POLE	TP	TELEPHONE POLE
PP	POWER POLE	+125.5'	SPOT ELEVATION

EDGE OF PAVEMENT
E E
OVERHEAD ELECTRIC LINE
FENCE LINE
PROPERTY LINE
AMSL .....ABOVE MEAN SEA LEVEL
AGL ..... ABOVE GROUND LEVEL
CP #.....FIELD CONTROL POINT

DATE OF SURVEY: 06/23/04

SURVEYED BY/ OR UNDER THE DIRECTION OF. Oliver Philip Auer L.S 5075 Expires 06/30/07

NOTES:

TITLE REPORT WAS AVAILABLE AT TIME OF FIELD SURVEY THIS IS A SPECIALIZED TOPOGRAPHIC SURVEY MAP, NOT A RECORD OF SURVEY. BOUNDARY LINES AND EASEMENTS SHOWN HEREON ARE BASED UPON A TITLE REPORT PROVIDED BY THE CLIENT AND INFORMATION GATHERED FROM LOCAL AND STATE AGENCIES COMBINED WITH MONUMENTATION LOCATED DURING THE FIELD SURVEY. THE LOCATION OF EXISTING UTILITY FACILITIES HAS NOT BEEN RESEARCHED. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE DELINEATION OF SUCH UNDER-GROUND UTILITIES, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH ARE NOT SHOWN ON THIS PLAN.

SUBJECT PROPERTY DESCRIPTION:

IN THE STATE OF CALIFORNIA, COUNTY OF SANTA CLARA, CITY OF MILPITAS, BEING PARCEL 12, PER AMENDED PARCEL MAP FILED JUNE 4, 1986, IN BOOK 560 OF MAPS, AT PAGES 45 AND 46, SANTA CLARA COUNTY RECORDS

LEASE AREA DESCRIPTION (PARCEL A):

COMMENCING AT THE SOUTHEAST CORNER OF SAID PARCEL 12; THENCE NORTH 64°18'38" WEST 110.92 FEET TO THE POINT OF BEGINNING, THENCE SOUTH 75°29' 39" WEST 39.00 FEET; THENCE NORTH 13°30'21" WEST 29.00 FEET; THENCE NORTH 75°29'39" EAST 39.00 FEET, THENCE SOUTH 13°30'21" EAST 29.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 1131 SQUARE FEET MORE OR LESS.

TOGETHER WITH AN ACCESS EASEMENT AS SHOWN ON SHEET 2 OF 2

TOGETHER WITH UTILITY AND COAXIAL CABLE EASEMENTS NECESSARY TO SERVE THE LEASE AREA AS SHOWN ON SHEET 2 OF 2.

BASIS OF ELEVATIONS NGVD 29 DATUM.

BASIS OF BEARINGS: AS INDICATED HEREON

PROJECT BENCH: AS INDICATED ON SHEET 2 OF 2.

OWNER'S INFORMATION: MILPITAS REDEVELOPMENT AGENCY
1265 N. MILPITAS BLVD.
MILPITAS, CA 95035
A.P.N. 029-17-004

NET AREA OF-
UNDERLYING PARCEL(S): 2.03± AC. LEASE AREA: 1131± SQ FT

FLOOD PLAIN ELEVATION OF LEASE AREA IN ZONE D, AS SHOWN ON FEMA FIRM MAP COMMUNITY-PANEL NUMBER 0603440D1F, DATED MAY, 1996, PER FEMA CD-ROM.

FAA 1A CERTIFICATION

LATITUDE AND LONGITUDE WAS OBTAINED FROM INFORMATION PROVIDED BY A GPS SURVEY. THE GEODETIC POSITION SHOWN WAS DETERMINED UTILIZING FAST-STATIC GPS OBSERVATIONS FROM USGS MONUMENTS USING TRIMBLE 4600LS RECEIVERS. THE DATA WAS DIFFERENTIALLY CORRECTED WITH TRIMBLE GPS SURVEY SOFTWARE.

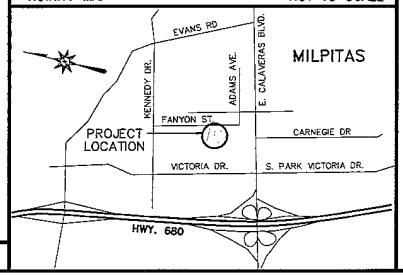
LATITUDE AND LONGITUDE DENOTED ON THIS PLAN ARE ACCURATE TO WITHIN 15± FEET HORIZONTALLY AND THE ELEVATIONS SHOWN ON THIS PLAN ARE ACCURATE TO WITHIN 3± FEET VERTICALLY.

ELEVATION OF GROUND AT GPS POINT 66.8' AMSL

STRUCTURE HEIGHT: N/A

LATITUDE:	37°26'19.36"	LATITUDE:	37°26'19.14"
LONGITUDE:	121°52'52.54" (NAD 27)	LONGITUDE:	121°52'56.38" (NAD 83)

VICINITY MAP NOT TO SCALE



Phil Auer Surveying
39382 Sutter Dr.
Fremont, CA 94538
Phone (510) 796-2101
Fax (510) 894-0794
E-mail auercats@ix.netcom.com

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680-CALAVERAS
1500272113
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING:	DATE:____
ZONING:	DATE:____
RF ENGINEER:	DATE:____
CONSTRUCTION:	DATE:____
EQUIP. ENGR:	DATE:____
OWNER:	DATE:____

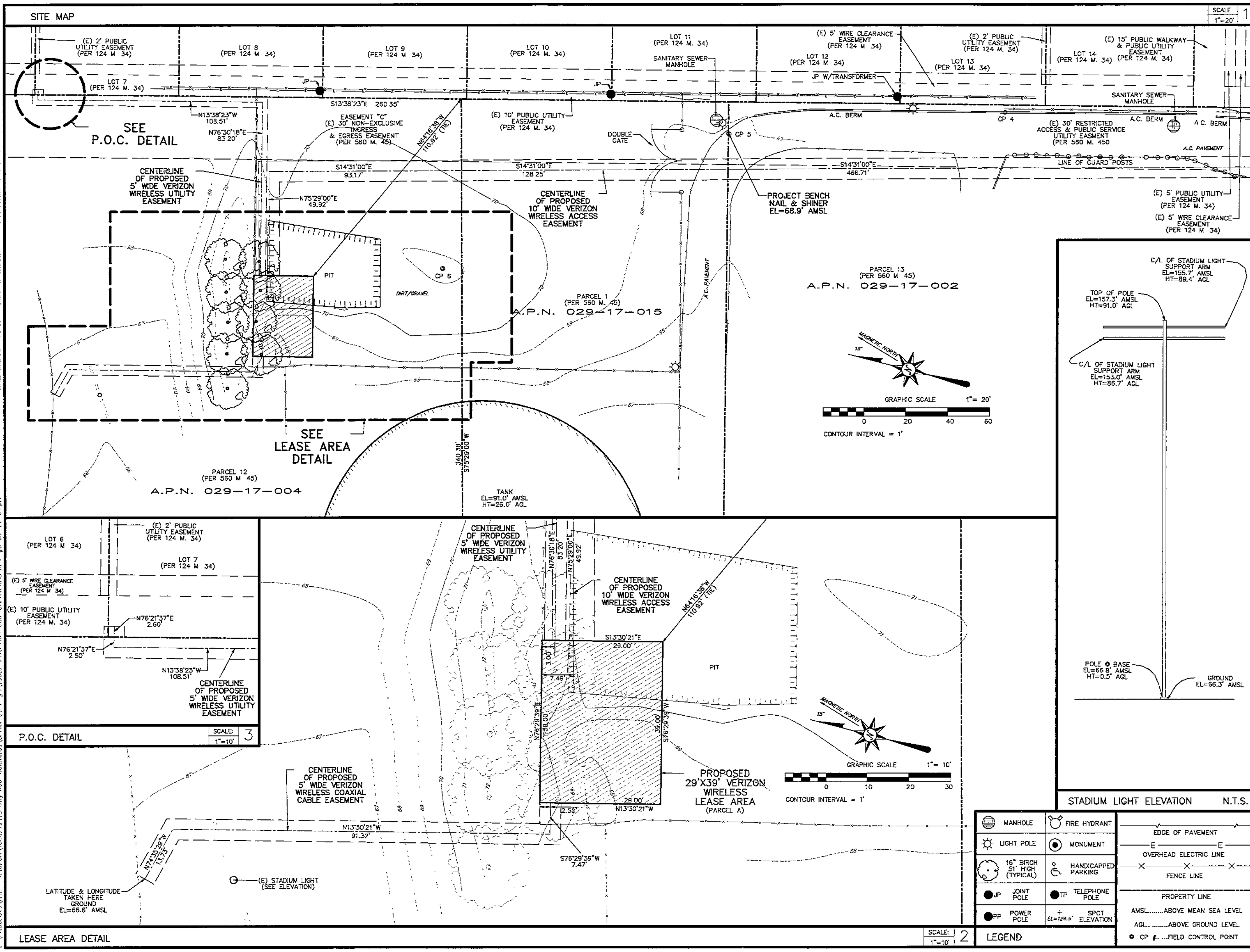
SITE NO	1500272113
APPROVED BY	OPA
DRAWN BY	TCN
CHECKED BY	OPA

NO.	DATE	ISSUE
1	06/25/04	ISSUED FOR 90% REV.
2	07/07/04	ISSUED FOR REV #1
3	07/15/04	ISSUED FOR REV #2
4	08/19/04	ISSUED FOR REV. #3

SHEET TITLE
SURVEY

SHEET NUMBER
C-1
SHEET 1 OF 2

COMPANY JOB NO. 1500272113



Phil Auer Surveying

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Phone: (510) 796-2101
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E-mail: auercats@ix.netcom.com

verizon wireless

VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680-CALAVERAS
1500272113
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING:	DATE:_____
ZONING:	DATE:_____
RF ENGINEER:	DATE:_____
CONSTRUCTION:	DATE:_____
EQUIP. ENGR:	DATE:_____
OWNER:	DATE:_____

SITE NO	1500272113
APPROVED BY	OPA
DRAWN BY	TCN
CHECKED BY	OPA

NO	DATE	ISSUE
1	06/25/04	ISSUED FOR 90% REV.
2	07/07/04	ISSUED FOR REV #1
3	07/15/04	ISSUED FOR REV. #2
4	08/19/04	ISSUED FOR REV. #3

SHEET TITLE

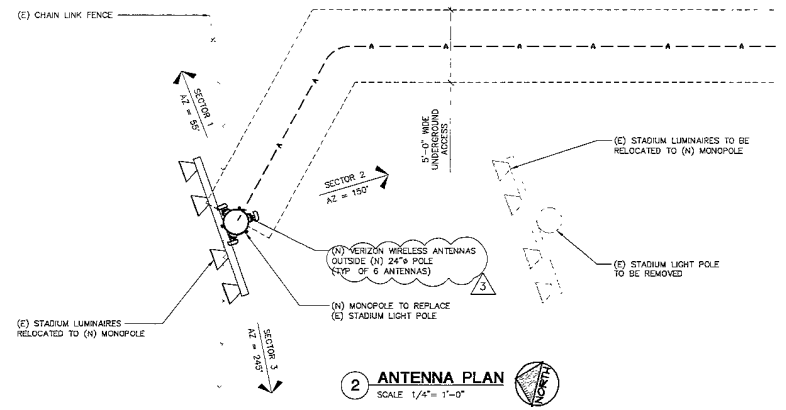
SURVEY

SHEET NUMBER

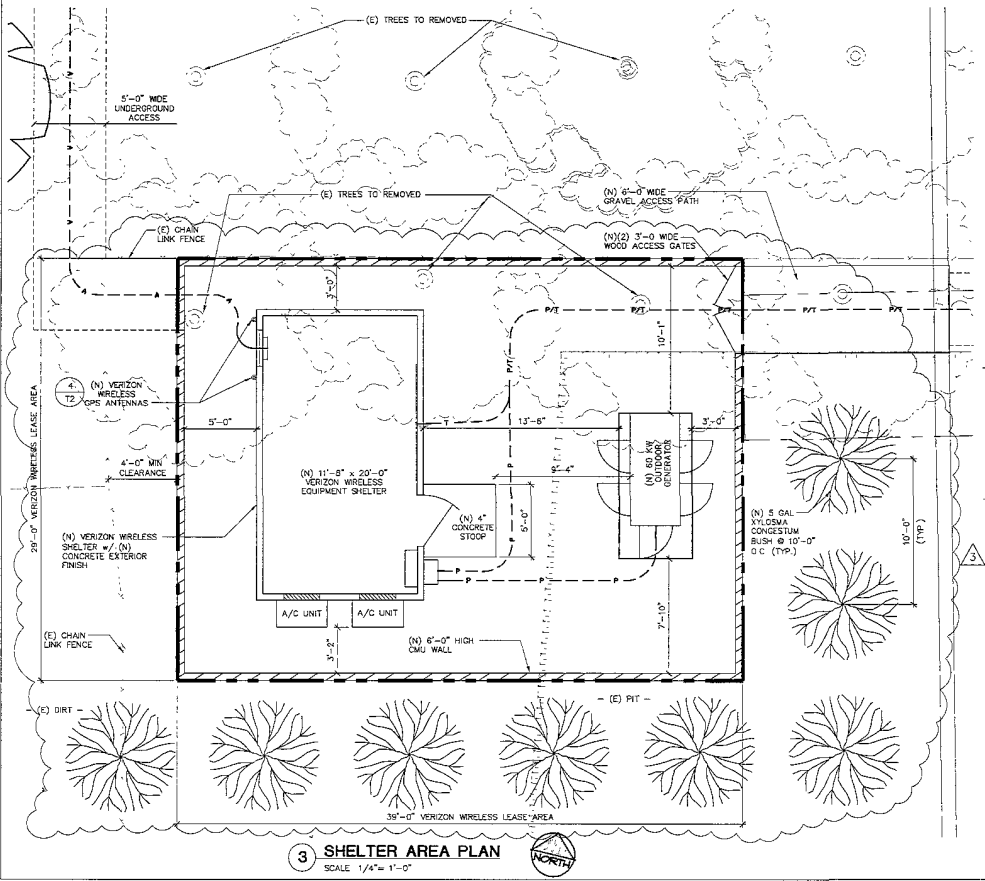
C-2

SHEET 2 OF 2

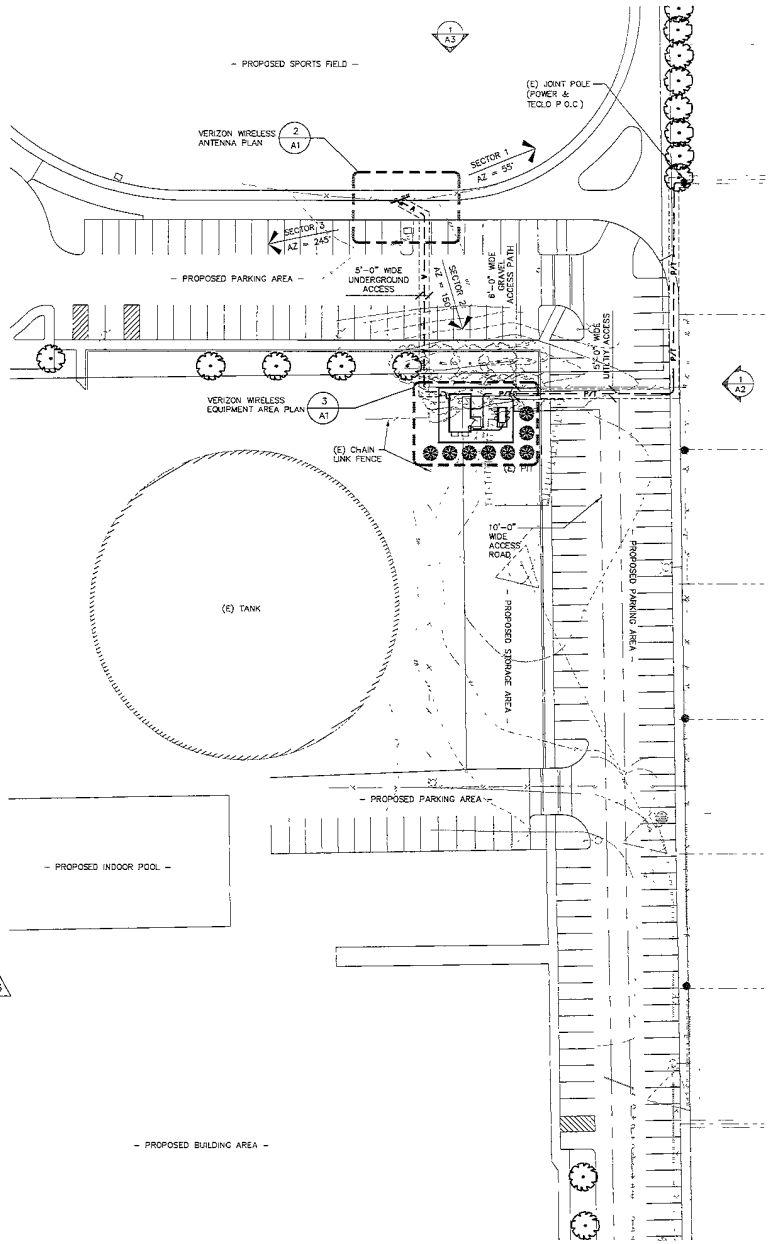
COMPANY JOB NO 1500272113



2 ANTENNA PLAN
SCALE 1/4"= 1'-0"



3 SHELTER AREA PLAN
SCALE 1/4"= 1'-0"



1 SITE PLAN
SCALE 1" = 30'-0"

ATI
ARCHITECTS AND ENGINEERS
2410 Douglas Boulevard
Roseville, CA 95661
Phone (916) 772-1600
3850 Blackhawk Road
Danville, CA 94506
Phone (925) 648-4300
Fax (925) 648-4811

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680 CALAVERAS
SITE NO. 117359 (3)
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING	DATE:
ZONING:	DATE:
RF ENGINEER:	DATE:
CONSTRUCTION:	DATE:
EQUIP. ENGR:	DATE:
OWNER:	DATE:

SITE NO	117359 (3)
APPROVED BY	MS
DRAWN BY	JN
CHECKED BY	SA

NO	DATE	ISSUE
1	07/09/04	ZD REVIEW
2	07/13/04	ZD SUBMITTAL
3	08/18/04	ZD REVISION

SHEET TITLE
SITE PLAN, ANTENNA PLAN & SHELTER AREA PLAN

SHEET NUMBER
A-1

COMPANY JOB NO. C7399

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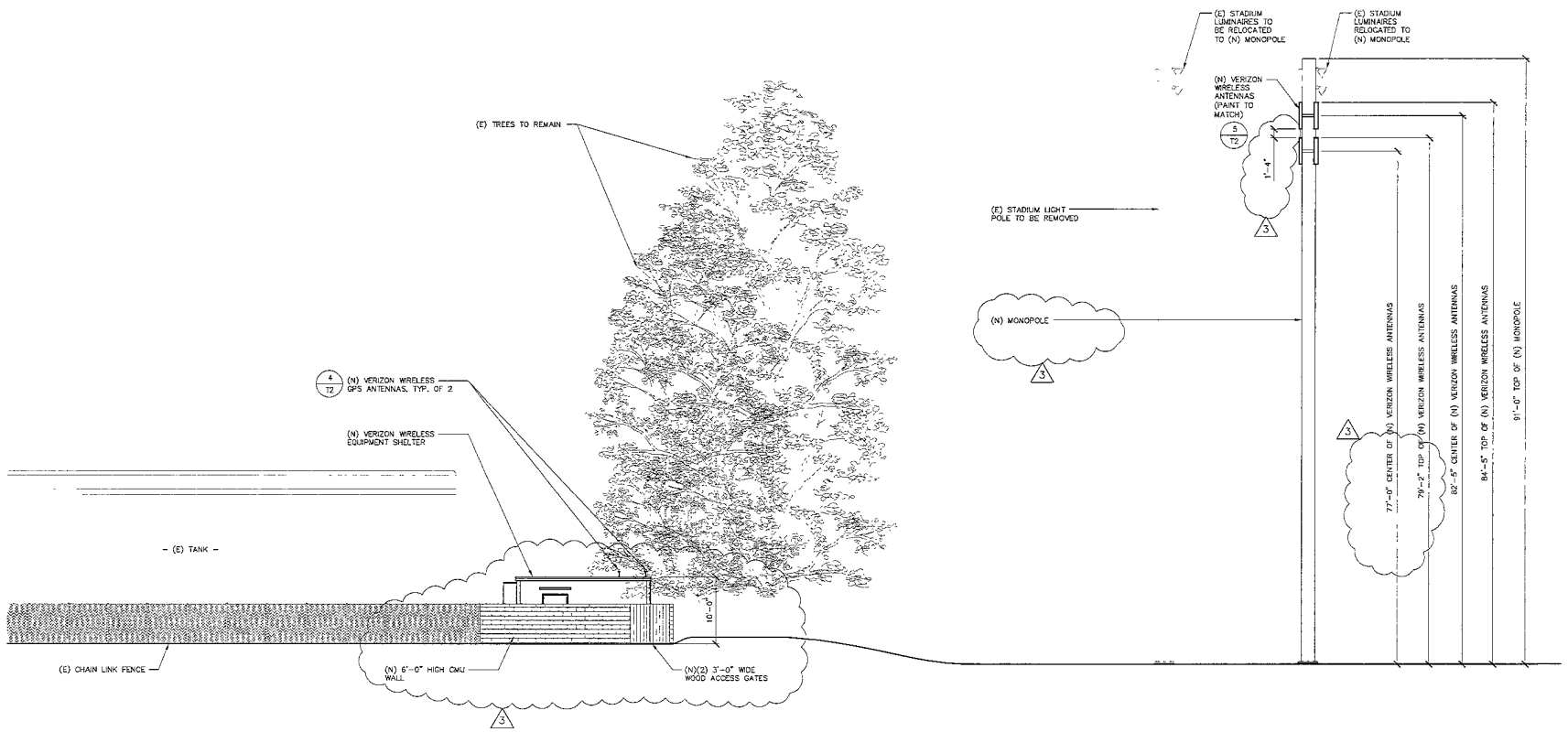

1 EAST ELEVATION
SCALE 1/8"=1'-0"

ATI
ARCHITECTS AND ENGINEERS
3860 Blackhawk Road
Danville, CA 94506
Phone (925) 648-8800
Fax (925) 648-8811
2410 Douglas Boulevard
Roseville, CA 95661
Phone (916) 772-1800

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680 - CALAVERAS
SITE NO. 117359
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING:		DATE:
ZONING:		DATE:
RF ENGINEER:		DATE:
CONSTRUCTION		DATE:
EQUIP. ENGR:		DATE:
OWNER		DATE:

SITE NO	117359
APPROVED BY	MS
DRAWN BY	JN
CHECKED BY	SA

NO	DATE	ISSUE
1	07/09/04	ZD REVIEW
2	07/13/04	ZD SUBMITTAL
3	08/18/04	ZD REVISION

SHEET TITLE
EAST ELEVATION

SHEET NUMBER
A-2

COMPANY JOB NO C7399

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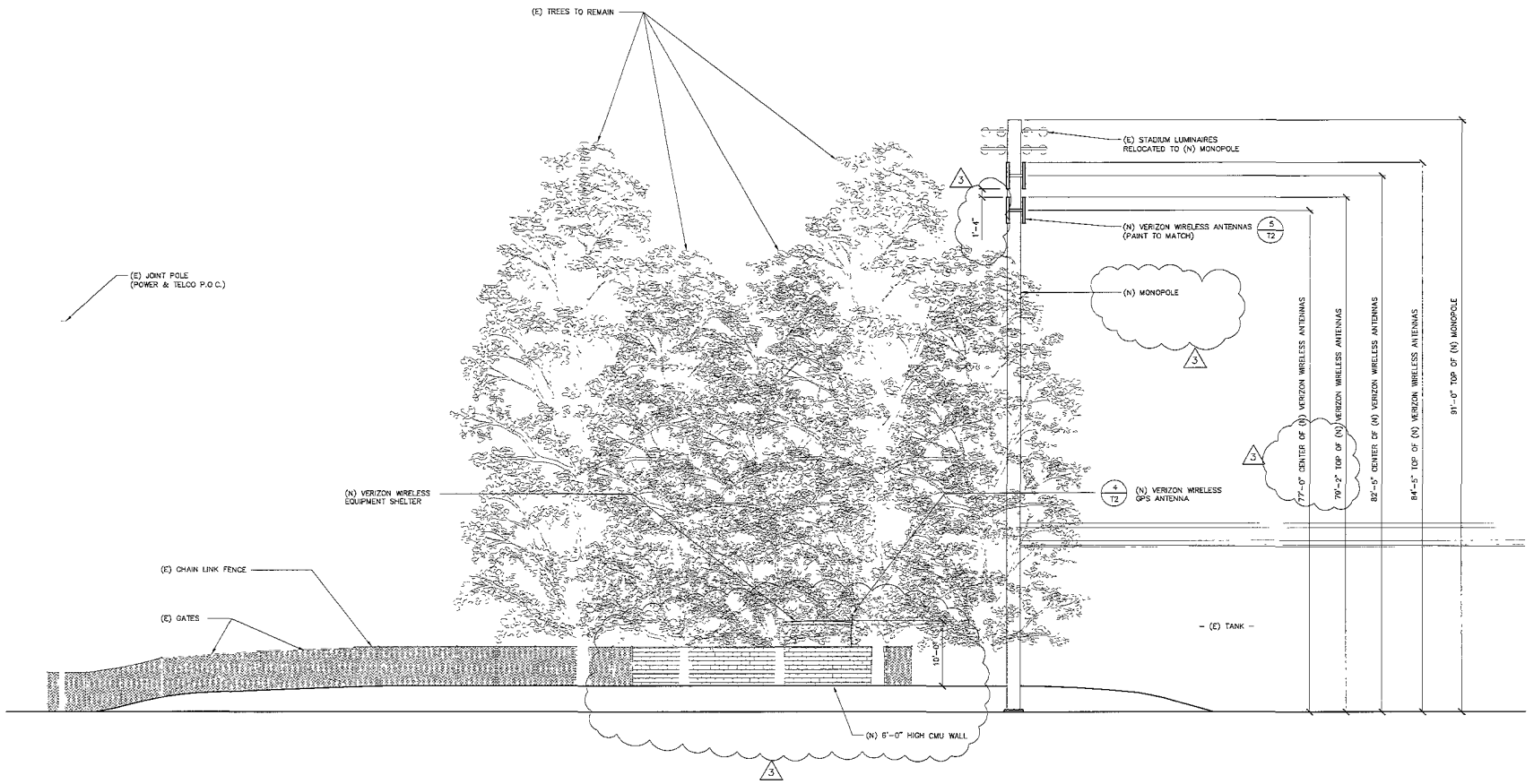

1 NORTH ELEVATION
SCALE: 1/8"=1'-0"

ATI
ARCHITECTS AND ENGINEERS
3865 Blackhawk Road
Danville, CA 94506
Phone (925) 648-8300
Fax (925) 648-8811
2410 Douglas Boulevard
Roseville, CA 95661
Phone (916) 772-1000

verizonwireless
VERIZON WIRELESS
2785 MITCHELL DRIVE
WALNUT CREEK, CA 94598

HWY. 680 - CALAVERAS
SITE NO. 117359
1325 E. CALAVERAS BLVD.
MILPITAS, CA 95035
SANTA CLARA COUNTY

APPROVALS

LEASING		DATE:
ZONING:		DATE:
RF ENGINEER:		DATE:
CONSTRUCTION:		DATE:
EQUIP. ENGR.		DATE:
OWNER		DATE:

SITE NO	117359
APPROVED BY	MS
DRAWN BY	JN
CHECKED BY	SA

NO	DATE	ISSUE
1	07/09/04	ZD REVIEW
2	07/13/04	ZD SUBMITTAL
3	08/18/04	ZD REVISION

SHEET TITLE
NORTH ELEVATION

SHEET NUMBER
A-3

COMPANY JOB NO C7399

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